(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 1 February 2001 (01.02.2001)

PCT

(10) International Publication Number WO 01/06989 A3

(51) International Patent Classification⁷: C 14/00, 16/00, A61K 38/00, 39/395

C07K 5/00,

(21) International Application Number: PCT/US00/20131

(22) International Filing Date: 24 July 2000 (24.07.2000)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/146,047 09/620,955 27 July 1999 (27.07.1999) US 21 July 2000 (21.07.2000) US

(71) Applicants and

(72) Inventors: HUSTON, James, S. [US/US]; 5 Drew Road, Chestnut Hill, MA 02467 (US). MESSER, Anne [US/US]; 95 Carstead Drive, Slingerlands, NY 12259 (US). LECERF, Jean-Michel [FR/US]; 24 Watson Street, Cambridge, MA 02139 (US).

(74) Agent: HALEY, James F. Jr.; Fish & Neave, 1251 Avenue of the Americas, New York, NY 10020 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM). European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

(88) Date of publication of the international search report: 16 August 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

/06989 A3

(54) Title: METHODS AND COMPOSITIONS FOR INHIBITING POLYPEPTIDE ACCUMULATION ASSOCIATED WITH NEUROLOGICAL DISORDERS

(57) Abstract: The invention provides methods for inhibiting the formation of undesired intracellular polypeptide complexes or aggregates associated with neurological disorders using an intrabody.

INTERNATIONAL SEARCH REPORT

International application No. PCT/US00/20131

	· · · · · · · · · · · · · · · · · · ·		
A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : C07K 5/00, 14/00, 16/00; A61K 38/00, 39/395 US CL :530/300, 350, 387.1; 424/130.1, 178.1 According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)			
U.S. : 530/300, 350, 387.1; 424/130.1, 178.1			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) MEDLINE, WEST, CAPLUS			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.
X	US 5,854,204 A (FINDEIS et al) 2 examples 1-12.	9 December 1998, abstract,	1-7, 24-34, 39-48, 78-93
X	US 5,686,288 A (MACDONALD et al) 11 November 1997, abstract, columns 2-3.		1-7, 24-34, 39-48, 78-93
x	US 5,891,873 A (COLACO et al) 06 April 1999, abstract, column 1, example 1.		1-7, 24-34, 39-48, 78-93
x	US 5,733,734 A (TROJANOWSKI et al) 31 March 1998, abstra		1-7, 78-93
	examples 1-6.		
Y			24-34, 39-48
Further documents are listed in the continuation of Box C. See patent family annex.			
Special categories of cited documents. A* document defining the general state of the art which is not considered T* later document published after the international filing date or priori date and not in conflict with the application but cited to understand the principle or theory underlying the invention		cation but cited to understand	
to be of particular relevance E carber document published on or after the international filling date. "X" document of particular relevance: the claimed invention cannot		clauned invention cannot be	
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other		considered novel or cannot be considered to involve an inventive step when the document is taken alone 'Y' document of particular relevance: the claimed invention cannot be	
special reason (as specified) Of document referring to an oral disclosure, use, exhibition or other means		document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
P* document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent family	
		Date of mailing of the international sea 14 MAR 2001	rch report
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231		Authorized offices Toulinace Jon SHARON L. TURNER	
Facsimile No. (703) 305-3730		Telephone No. (702) 709 0106	

INTERNATIONAL SEARCH REPORT

International application No. PCT/US00/20131

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)			
This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:			
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:			
2. X Claims Nos.: 2, 8-23, 30, 35-38, 40, 44, 49-77, 80, 85 and 87 because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically: Please See Extra Sheet.			
3. Claims Nos.:			
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).			
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)			
This International Searching Authority found multiple inventions in this international application, as follows:			
1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.			
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.			
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:			
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:			
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.			
France and fragment of administration souther root.			

INTERNATIONAL SEARCH REPORT

International application No. PCT/US00/20131

BOX 1. OBSERVATIONS WHERE CLAIMS WERE FOUND UNSEARCHABLE 2. Where no meaningful search could be carried out, specifically:

The functional and structural limitations of the recited "intrabody" lack such meaningful written description that a search cannot be directed to the element. Further as to the recited intrabody of claims 21, 22 and 38 which recite a specified SEQ ID NO: such elements cannot be meaningfully searched as the case lacks proper sequence compliance as indicated in the CRF error report of 9-18-00 for which no response has been filed. Claims 2, 30, 40, 44, 56, 63, 69, 73, 80, 85 and 87 lack meaningful limiting structural or functional structure to the elements of the recited acronyms SOD, AR, CACNL1A4, SCA7, FTD, SBMA, DRPLA, SCA1, SCA2, SCA3/MJD, SCA4, SCA5, SCA6 and SCA7 such that a meaningful search may be carried out or such that the patients may be distinguished.